



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/006,959

11/05/2001

Todd D. Creger

00-608

2767

719

7590

10/23/2008

Caterpillar Inc.
Intellectual Property Dept.
AH 9510
100 N.E. Adams Street
PEORIA, IL 61629-9510

EXAMINER

DAY, HERNG DER

ART UNIT

PAPER NUMBER

2128

MAIL DATE

DELIVERY MODE

10/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/006,959</p>	<p>Applicant(s) CREGER ET AL.</p>	
	<p>Examiner HERNG-DER DAY</p>	<p>Art Unit 2128</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 October 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-12.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Kamini S Shah/
Supervisory Patent Examiner, Art Unit 2128

Continuation of 11. does NOT place the application in condition for allowance because:

Applicants' arguments are not persuasive. For example:

1. Regarding claim 1, Applicants has argued in page 3, the last second line through page 4, line 2, "Quist adds that '[f]or example, whenever a machine 11 fails, the collected data corresponding to that machine may be used by such a global neural network as a known data set for training purposes.' Quist, col. 19, ll. 8-11. In other words, Quist provides an example of refining the neural network without a need for comparison."

The Examiner respectfully disagrees with Applicants' argument. First, without anticipative variations in the compared data, there is no motivation to refine the weighting parameters. In other words, comparing is inherently implied and variations are anticipated before the weighting parameters are refined. Second, claim 1 recites no detailed limitations regarding "the corresponding data of the model development machine (e.g., material of the machine; material is relevant to predicting the expected life, the characteristics and operations of the machine)" and how to use the "variations in the compared data" to "update at least one of an estimator and a model". Furthermore, no specific limitation regarding "comparing" has been recited. In other words, even a mental comparing reads into the claim. Therefore, for the purpose of claim examination with the broadest reasonable interpretation, whenever a machine 11 fails, Quist's refining the neural network with the collected data is definitely the result "in response to variations" in "comparing" the collected data with the lost, invalid, or unavailable data of the failed machine.

2. Regarding claim 7, Applicants has argued in page 5, lines 7-10, "Quist describes updating neural networks with data collected from local monitoring devices. In contrast, claim 7 recites 'comparing the computed parameter with the estimated parameter' (emphasis added). Quist does not disclose or even suggest this feature."

The Examiner respectfully disagrees with Applicants' argument. First, without anticipative variations in the compared data, there is no motivation to refine the weighting parameters. In other words, comparing is inherently implied and variations are anticipated before the weighting parameters are refined. Second, claim 7 recites no detailed limitations regarding how to use the "variations in the computed parameter and the estimated parameter" to "update at least one of an estimator and the delivered neural network model". Furthermore, no specific limitation regarding "comparing" has been recited. In other words, even a mental comparing reads into the claim. Therefore, for the purpose of claim examination with the broadest reasonable interpretation, Quist's "refining the weighting parameters and downloads the parameters to local monitoring devices" is definitely the result "in response to variations" in "comparing" the computed parameter and the estimated parameter.

3. Regarding claim 10, Applicants has argued in page 6, lines 4-8, "Contrary to the Office Action's assertions, none of these disclosures teaches or even suggests 'determining a level of variability of the characteristics of each machine as a function of the data' (emphasis added) or 'determining a level of variability of the operations of each machine relevant to a respective work site as a function of the data,' as recited in claim 10." and in page 6, lines 14-15, "Quist discloses monitoring running time. Quist does not disclose or suggest 'determining an aging factor.'"

The Examiner respectfully disagrees with Applicants' arguments. Please refer to paragraphs 5-4 and 5-5 in Office Action dated June 23, 2008 for "Response" to Applicants' arguments.